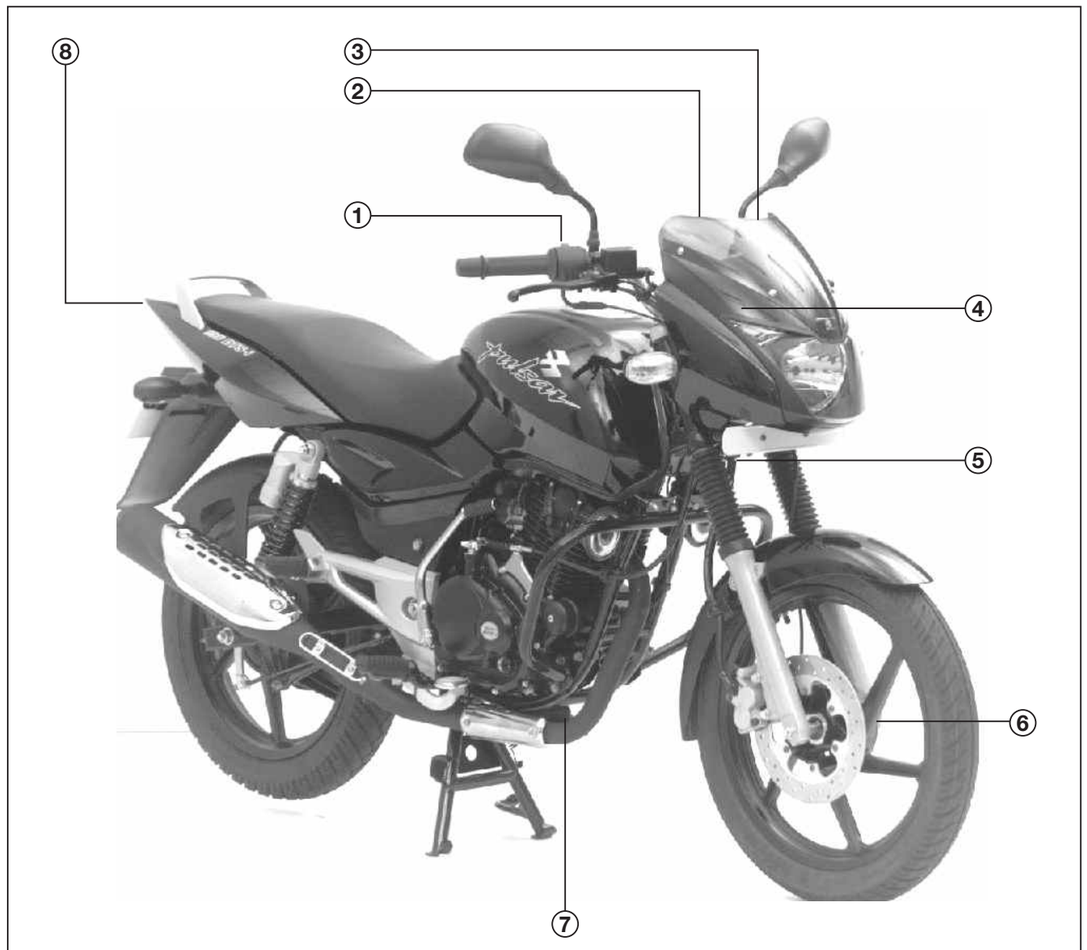
The Engine and Frame serial numbers are used to register the vehicles. They are the only means of identifying your particular vehicle from the other of the same model and type. These serial numbers may be needed by your dealer when ordering the parts. In the event of theft, the investigating authorities will require both these numbers in addition to the model, type and any special features of your vehicle that can help identifications.

Location of Parts



1. **Control Switch RH**
2. **LCD Speedo Console**
3. **Control Switch LH**
4. **Body Control Unit**
   (Placed inside Head Light fairing)
5. **Hall Sensor for Indicator**
6. **Vehicle Speed Sensor**
7. **Exhaus*TEC***
8. **Tail Light LED display**

Performance :

- Refined engine power delivery by optimization of Exhaus TEC location and revised ignition timing with intelligent CDI
- New clutch & revamped gear shifting mechanism that gives smooth, positive, virtually friction-free gear shift feel
- New Bigger twin foam filter with an optimized intake system to provide better torque
- Optimized valve timing and Roller rocker with NR bearing for friction reduction that improves drivability.
- LED tail lamp that consumes negligible power & require zero maintenance
- Stainless steel silencer that overcomes rusting problem
- All sensor type electrical switches that enables switches to function for the life of the bike. Absolutely no maintenance in absence of mechanical contacts.

Style :

- **Stylish fairing** and head lamp assembly with owleye
- A new black mask that separates headlamp from parking lights adds to aesthetics.
- Clear lens indicator with amber bulbs.
- New age, sharp and attractive 2 Row Tail lamp with LED lights
- New seat cowl to match stylish LED tail lamp.
- Louver type LH & RH covers with wire mesh gives sturdy look.
- Ergonomically designed self-letting switches

Convenience and Comfort

- LCD Speedo Console with digital fuel gauge (12 level indicator)
- Digital speed display, odometer and two trip meter with resetting provision.
- Self-canceling indicators After completion of turn, the indicator will be switched off automatically.
- Engine oil level window for easy to monitor level.
- Maintenance free battery once a year electrolyte top up.
- In addition to Fuel gauge, Reserve indicator bulb is provided that glows continuously till the petrol filled to main level.
- Self check provision for Tachometer for its functioning

Safety :

- Day night mode of Speedo console
- The turn Indicator, neutral, high beam, and side stand Indicator bulb glow brightly in the day for clarity, and Intensity reduces during night to reduce irritance to the rider's eye
- High RPM warning lamp when engine reaches to 9000 RPM automatically Red LED bulb starts blinking. This enables the rider to control the speed to avoid damages if any that may take place to engine components.
- Engine cut-off at 10000 RPM Spark gets cut-off at 10000 RPM to bring down the engines RPM for safety.
- LED illumination for tell-tale icons on electrical switches that glows in the night for positive access of individual functions.

Engine and Transmission

Type		:	Four stroke DTS-i, Natural air cooled.
No. of cylinders		:	One
Bore		:	63.50 mm.
Stroke		:	56.40 mm.
Engine displacement		:	178.60 cc.
Compression ratio		:	9.5 $\pm$ 0.5:1
Idling Speed		:	1400 $\pm$ 100 rpm.
Max. net power		:	12.15 kW (16.51 Ps) at 8000 rpm.
Max. net torque		:	15.22 Nm at 6000 rpm.
Ignition System		:	Microprocessor controlled digital C.D.I.
Ignition Timing		:	10^0 BTDC at 1500 rpm.
		:	28^0 BTDC at 3500 rpm.
Fuel		:	Unleaded petrol
Carburettor		:	UCAl-MIKUNI BS29, Side Drought, CV Type.
Spark Plug		:	2 Nos. Champion RG4HC, Bosch UR3DC (Resistive)
Spark Plug Gap		:	0.7 to 0.8 mm.
Lubrication		:	Wet sump, Forced.
Starting		:	Kick start / Electric start.
Clutch		:	Wet, Multidisc type.
Transmission		:	5 speed constant mesh.
Primary Reduction		:	3.47 : 1 (66/19)
Gear Ratios:	1st gear	:	26.93 : 1 (36/13)
	2nd gear	:	18.31 : 1 (32/17)
	3rd gear	:	13.43 : 1 (29/21)
	4th gear	:	10.54 : 1 (26/24)
	5th gear	:	8.98 : 1 (24/26)
Final drive ratio		:	2.80 : 1 (43/15)

CHASSIS & BODY

Frame Type		:	Double cradle.
Suspension	Front	:	Telescopic front fork with DU bush (Stroke 135mm)
	Rear	:	Trailing arm with coaxial hydraulic cum gas filled adjustable shock absorbers, and triple rate coil springs.
Brakes	Front	:	Mechanically expanding shoe and drum type. Hydraulically operated disc type.
	Rear	:	Mechanically expanding shoe and drum type.
Tyres	Front	:	2.75 x 17, 41 P
	Rear	:	100/90 x 17, 55 P
Tyre Pressure	Front	:	1.75 kg/cm^2 (24.5 Psi)
	Rear Solo	:	2.00 kg/cm^2 (28.0 Psi)
	Rear Pillion	:	2.25 kg/cm^2 (32.0 Psi)
Rims (Alloy Wheels)	Front	:	1.60 x 17
	Rear	:	2.15 x 17

Fuel Tank Capacity		:	15 liters Full
		:	3.2 liters Reserve
		:	2.0 liters Usable reserve

CONTROLS

Steering		:	Handle Bar
Accelerator		:	Twist grip type on RH side of handle bar
Gears		:	Left foot pedal operated
Clutch		:	Lever operated on LH side of handle bar
Brakes	Front	:	Lever operated on RH side of handle bar
	Rear	:	Pedal operated by right foot

ELECTRICALS

System	:	12 V (AC+DC)
Battery	:	12V 9Ah
Head Lamp	:	35/35 W-HS1
Pilot Lamp	:	5W - 2 Nos.
Tail/Stop lamp	:	LED
Turn signal lamp	:	10 W (2 Nos.)
Turn signal pilot lamp	:	LED
Side stand indicator lamp	:	LED
Hi beam indicator lamp	:	LED
Neutral indicator lamp	:	LED
Speedometer lamp	:	LED display
Rear number plate lamp	:	5 W
Horn	:	12V DC

DIMENSIONS

Length	:	1990 mm.
Width	:	750 mm.
Height	:	1090 mm.
Wheel base	:	1320 mm.
Turning circle radius	:	2180 mm. (Minimum)
Ground clearance	:	165 mm. (Minimum)

WEIGHTS

Vehicle kerb weight	:	143 kg.
Gross vehicle weight	:	273 Kg.

PERFORMANCE

Maximum speed	:	125 km/h with single rider (68kg)
Climbing ability	:	28% (16^0 Maximum)

Notes:

- **Values given babove are nominal and for guidance only, 15% variations is allowed to cater for production and measurement variation.**
- **All dimensions are under UNLADEN condition.**
- **Definitions of terminologies wherever applicable are as per relevant IS/ISO standards.**
- **Specifications are subject to change without notice.**

What are the special features of 'PULSAR DTS-i 180 UG III '? OR

What is so special in this 'PULSAR DTS-i 180 UG III '?

Pulsar UGIII is next version of Pulsar breed. It is loaded with lots of unique & contemporary features and that distinguishes the Pulsar not only in the category of Power, Performance & Style but also for Comfort, Convenience & Safety from the competition.

Apart from refining the power delivery, it is loaded with the features that are meant for cars. So, here is the Comfort, Convenience & Safety of the 4 wheels (cars) available on 2 wheels.

The major changes / features are

Enhanced Performance

- Refined engine power delivery by optimization of ExhausTEC location, bigger & twin Air Filter element, optimized valve timing, reduced engine friction etc.
- Stainless steel silencer that lasts long & overcomes rusting.
- All sensor type electrical switches that function for the life of the bike. Absolutely no maintenance in absence of mechanical contacts.

Enhanced Style

- Stylish fairing & Headlamp assembly with owl eye, new black mask to separate headlamp from parking lights
- New age, sharp & attractive 2 Row Tail lamp with LED lights
- Louver type LH & RH covers with wire mesh gives sturdy look.
- Ergonomically designed self-letting switches
- Absolutely no maintenance in absence of mechanical contacts.

Enhanced Comfort & Convenience

- Loaded with Digital Technology like LCD Speed/Odo display, digital fuel meter, Digital trip meter that enables to count two trips.
- Car like self canceling indicator switches that keeps rider free from switching off the indicators after turn.
- Apart from digital fuel meter, warning light for low fuel level is provided.
- Self check provision for tachometer to ensure proper functioning.
- Oil level inspection window that indicates oils level at a glance.

Enhanced Safety

- Engine cut-off at 10000 RPM Spark gets cut-off at 10000 RPM
- High RPM warning lamp when engine reaches to 9000 RPM automatically Red LED bulb starts blinking.
- Day night mode of Speedo console, LED illumination for tell-tale icons on electrical switches that glows in the night for positive access.

How does the digital Speedo work?

Front wheel of the bike has a sensor & magnet unit. The sensor counts no. of pulses w.r.t. wheel rotation & logically calculates number of wheel rotation & gives input to the display unit in the speedo console and the LCD display indicates accurate speed, odo reading & trip meter readings.

What are the advantages / Benefits of the digital speedometer apart from giving accurate reading?

This system is totally contact less & no mechanical transmission of drive from wheel to speedometer is available. Thus this system is totally maintenance free & lasts for the life of the bike.

How the digital fuel indicator meter works? OR How one can understand the available fuel level in the fuel tank? OR How to read the graphical bar of the fuel meter?

Graphic bar with 12-segment display is provided in the speedo console for indicating fuel level in the tank. If the all the 12 segments of a bar graph are 'ON', that indicates that the fuel tank is full.

As the float gauge in the tank starts lowering down due fuel level coming down, the segments of the bar graph starts diminishing with corresponding drop in fuel level.

When the petrol level comes down to below four liters, all the segments of the bar will vanish.

Apart from LCD graph bar, a red warning light also has been provided in the console that glows continuously when the petrol level falls down to reserve. And it will be 'ON' till petrol is filled above reserve level.

When the digital fuel meter is available, why the red warning light is provided?

While the LCD graphical bar segments indicates the petrol level in the fuel tank, the red warning light continuously reminds the rider to fill the petrol.

Why two trip meter reading option is given? How is it useful?

It is just to enable the rider to count reading for two different trips unlike only single trip in case of conventional type.

It is like this - on selecting 'Trip1' its will indicate the distance covered in first trip that is set for. In continuation, on selecting 'Trip2', it will indicate the distance covered in the second trip. Then if one wants to know the cumulative distance covered in first & second trip, it can be found in 'Trip1' mode. For this one has to just press/select 'Trip1' mode.

This is an added advantage taken from digital technology!

What do Self-canceling Indicators switches means?

In conventional type of switches, the rider has to manually depress or turn knob of indicator switch for putting 'OFF' the indicator bulbs. In case of this Self-canceling' switches the indicator goes off automatically after the rider takes a turn & brings the handle bar straight. This feature is similar to cars. That means, rider do not have to press or turn the switch to cancel the indicators.

What if one switches ON the indicator and do not physically take a turn? Will it work in such situation?

Yes. Of course. When the rider selects a right or left turn indicator, but changes his mind and physically do not take a turn, the indicators turn 'OFF' automatically after pre-set time. For this a timer function is incorporated in the system. And the timing for this timer is set around 80 seconds.

What does non-contact Handlebar switches mean?

The control switches on both sides of the handlebar are conventional to look at, in terms of switch operations & knob position etc. But the key & distinguishing difference is the principle of functioning that means these switches do not function on the basis of physical contact for ON & OFF. These are on non-contact sensor based.

This feature will have any wear and tear & hence its life would be more than the life of the bike. These are absolutely maintenance free as far as wear & tear is concerned.

The other feature, in these switches is the Illumination of the tell-tale icons that is lit up with LEDs inside the switch body. This gives the icons a pleasant bluish white glow that can be seen in the night clearly & coolly.

The tail lamp assembly seems to be too special. What is so in that?

Yes. The tail lamp is unique on this vehicle and no other competitor's vehicle has this feature. It consists of 16 (8) nos. of LED bulbs with bi-filaments.

The specialties of LED bulbs are

- Consume very low current
- Glow brightly
- Last far long
- Totally maintenance free

So, the LED tail lamp apart from delivering fantastic performance, it adds to aesthetics.

What is this bi-filament bulb?

Bi-filament bulb means these LED bulbs have two filaments in each bulb. One filament of lower wattage for parking lights & another for brake lighting, which is of little higher wattage.

If so much so electrical /electronic appliances are loaded, it may affect on Battery?

Absolutely not. In fact, all the bulbs & backlit bulbs in the Speedo console (except Head Lamp bulb & pilot bulbs) are of LED type. Few of them works on AC & few are on DC i.e. battery. So there is hardly any drain on the battery as compared to conventional type of bulbs.

Moreover, the Battery of this new Pulsar 180 is special & maintenance free.

What is this maintenance free Battery?

The battery is new development in DC system on two wheelers (in fact, such batteries are introduced in cars earlier than bikes) it is different than the conventional one in the material composition it is made up of. The main features of this new battery are

- Electrolyte level checking is required at every one year instead of every fortnight
- The unique vent mechanism that do not allow loss of electrolyte
- No drainpipe unlike in conventional type battery. So no chances of spillage of electrolyte.

So, in all it is almost maintenance free battery. Moreover, the LED bulbs, & disable function of cranking after 3 successive self starts attempts, will further only enhance the life of the battery.

What is that disabling of cranking after 3 successive attempts?

A protective device has been incorporated in the system that allows rider to attempt self-start option (pressing of self-start button) for starting only three times at times. After third attempt the battery power supply gets cut-off to the self-starter motor, thus avoid rider from further cranking of engine by self-start.

This is mainly to protect the battery from over draining by excess attempts of pressing of self-start button to start the engine.

However, one can again use the self-start option after 15 seconds after third attempt.

How come so many features are managed accurately & what is the guarantee of no malfunctioning of these features?

It is needless to say that the digital technology that works with sensors & chips works accurately. To control all the functions of these electronics features, an intelligent device has been installed in the electrical system. This is called BCU (Body Control Unit)

What exactly is BCU (Body Control Unit)? How it controls all these functioning?

BCU (Body Control Unit) is a device that integrates & controls major of all electrical / electronic functions on the vehicle. It is an intelligent device that works on microchip base.

In the eventuality of electrical overloads or short circuits, the built in intelligent protection circuit takes the control of the situation & prevent future damages on other electronic parts. For example:- During night, suppose one of the Head light filament blows OFF then there is a possibility of an accident due to sudden darkness.. To rescue, here the BSU plays an important role. It switches over the Headlight to the other beam automatically without manual shifting of any switches.

It also checks & inspects the fused circuit religiously for any corrections and thus riders' safety is ensured.

Are these type of product features available in Pulsar150cc also?

Presently not. But as in all sphere of life, technology also proliferates. When that happens you may find similar features in Pulsar 150cc also.

Can one alter the current Pulsar model & incorporate these features?

No. It is not possible. Physically lot of changes are there that are not easily accommodated in the existing Pulsar.

Sl.	Check Points for PDI	Check	PDI done by BAL/ Service Engg.	PDI Done by Dealer
1	LOCK OPERATION			
	STEERING LOCK NOT WORKING/JAM			
	SIDE COVER LOCK NOT WORKING			
2	PAINT FINISH - OVER FLOW (Samples / photographs)			
3	FUEL TANK DEFECTS			
	LEAKAGE			
	BLISTERS			
	RUSTY			
	OTHERS (Specify)			
4	FUEL COCK OPERATION - HARD / LEAKAGE			
5	FRONT / REAR WHEEL OFFSET			
6	WHEEL			
	FR. WHEEL TYRE -Free rotation.			
	FRONT WHEEL RUNOUT (SPECIFY)			
	REAR WHEEL RUN OUT (SPECIFY)			
7	SILENCER -BAFFLE NOISE			
8	SWITCHES			
	RH switch operations			
	LH Switch operations			
	IGNITION SWITCH SHORT			
9	LIGHTS:-			
	Side indicator blinking.			
	HEAD LIGHT			
	TAIL/BRAKE LED			
10	HORN :- DISTORTED/WEAK SOUND(DO NOT SET)			
11	Speedo :			
	SPEEDO NOT SENSING.			
	SPEEDO Needle flickering.			
	Tripmeter - 1/2 working -Resetting			
	Odometer working			
	Auto - Calibration of RPM meter			
	Fuel level indication			
	Reserve indication (by red lamp)			
	Red lamp blinking after crossing Engine RPM 9000			
	Auto-switch off of Ind lamps(H bar straight for > 2 sec)			
	Head light / tail light illumination after 3 seconds			
	LED functioning - Speedounit - Both side indication, Side stand, Neutral, Hi beam, RES ind lamp			

Ghid Reparații

Acest fișier este un exemplu. Vă rugăm descărcați versiunea originală apăsând butonul **Descarcă** din website.

www.ghidreparatii.ro/